What is Claimed:

1. A method for copying a portrait-oriented graphic in a system memory to a landscape-oriented frame buffer for portrait-oriented display on a default landscape-oriented display device, said method comprising the steps of:

reading a first plurality of blocks from the system memory into an L2 cache, said plurality of blocks comprising:

a first plurality of pixels, comprising a sub-column of vertical pixels in the graphic, said first plurality of pixels to reside in consecutive memory locations of the frame buffer; and

a second plurality of pixels, comprising a sub-column of vertical pixels in the graphic adjacent to the first plurality of pixels, said second plurality of pixels to reside in consecutive memory locations of the frame buffer;

writing said first plurality of pixels to the frame buffer via a write-combine cache; and

writing said second plurality of pixels to the frame buffer via the write-combine cache.

2. The method of claim 1 wherein said plurality of blocks further comprising at least one additional plurality of pixels, each such plurality of pixels comprising a sub-column of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer, said method further comprising writing each such plurality of pixels to the frame buffer via the write-combine cache.

3. The method of claim 2 wherein all pixels in all of said pluralities of pixels are written to the frame buffer via the write-combine cache using said method.

4. The method of claim 3 further comprising:

reading a second plurality of blocks from the system memory into the L2 cache, said plurality of blocks comprising at least one plurality of pixels, each such plurality of pixels comprising sub-columns of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer; and

writing each such plurality of pixels to the frame buffer via the write-combine cache.

5. The method of claim 4 further comprising:

reading at least one additional plurality of blocks from the system memory into the L2 cache, each of said plurality of blocks comprising at least one plurality of pixels, each such plurality of pixels comprising sub-columns of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer; and

for each such plurality of blocks, writing each such plurality of pixels to the frame buffer via the write-combine cache.

6. The method of claim 5 wherein all pixels in said portrait-oriented graphic are written to the frame buffer via the write-combine cache using said method.

7. The method of claim 5 wherein said portrait-oriented graphic is displayed on the display device in a primary portrait mode.

8. The method of claim 5 wherein said portrait-oriented graphic is displayed on the display device in a primary portrait mode.

9. A system for copying a portrait-oriented graphic in a system memory to a landscape-oriented frame buffer for a default landscape-oriented display device, said system comprising:

a processor, said processor comprising an L2 cache and a write-combine cache;

a system memory coupled to said processor, said system memory comprising a portrait-oriented shadow memory;

a landscape-oriented frame buffer coupled to said processor; and

computer instructions for said processor to load a plurality of blocks comprising pixels from system memory into the L2 cache, process said pixels into two or more sub-columns comprising pixels that will be written to consecutive memory locations of the frame buffer, and write said sub-columns to a frame buffer via the write-combine cache.

10. The system of claim 9 further comprising:

a subsystem for reading a first plurality of blocks from the system memory into an L2 cache;

a subsystem for organizing at least one pixel sub-column, comprising pixels that will reside in consecutive memory locations of the frame buffer, to be written to said frame buff via the write-combine cache; and

a subsystem for writing said pixels sub-columns to the frame buffer via the write-combine cache.

11. The system of claim 9 wherein said computer instructions further comprising instructions for all pixels in all of said pluralities of pixels are written to the frame buffer via the write-combine cache using said method.

12. The system of claim 11 wherein said computer instructions further comprise instructions for reading a second plurality of blocks from the system memory into the L2 cache, said plurality of blocks comprising at least one plurality of pixels, each such plurality of pixels comprising sub-columns of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer, and for writing each such plurality of pixels to the frame buffer via the write-combine cache.

13. The system of claim 12 wherein said computer instructions further comprise instructions for reading at least one additional plurality of blocks from the system memory into the L2 cache, each of said plurality of blocks comprising at least one plurality of pixels, each such plurality of pixels comprising sub-columns of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer, and for each such plurality of blocks, writing each such plurality of pixels to the frame buffer via the write-combine cache.

14. The system of claim 13 wherein said computer instructions further comprising instructions for all pixels in said portrait-oriented graphic to be written to the frame buffer via the write-combine cache.

15. The system of claim 13 wherein said portrait-oriented graphic is displayed on the display device in a primary portrait mode.

16. The system of claim 13 wherein said portrait-oriented graphic is displayed on the display device in a primary portrait mode.

17. A computer-readable medium having computer-readable instructions for copying a portrait-oriented graphic in a system memory to a landscape-oriented frame buffer for a default landscape-oriented display device, said computer-readable instructions comprising:

instructions for reading a first plurality of blocks from the system memory into an L2 cache, said plurality of blocks comprising:

a first plurality of pixels, comprising a sub-column of vertical pixels in the graphic, said first plurality of pixels to reside in consecutive memory locations of the frame buffer; and

a second plurality of pixels, comprising a sub-column of pixels in the graphic adjacent to the first plurality of pixels, said second plurality of pixels to reside in consecutive memory locations of the frame buffer;

instructions for writing said first plurality of pixels to the frame buffer via a write-combine cache; and

instructions for writing said second plurality of pixels to the frame buffer via the write-combine cache.

18. The computer-readable medium of claim 17 wherein said plurality of blocks further comprising at least one additional plurality of pixels, each such plurality of pixels comprising a sub-column of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer, and further comprising instructions for writing each such plurality of pixels to the frame buffer via the write-combine cache.

19. The computer-readable medium of claim 18 further comprising instructions for all pixels in all of said pluralities of pixels to be written to the frame buffer via the write-combine cache.

20. The computer-readable medium of claim 19 further comprising:

instructions for reading a second plurality of blocks from the system memory into the L2 cache, said plurality of blocks comprising at least one plurality of pixels, each such plurality of pixels comprising sub-columns of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer; and

instructions for writing each such plurality of pixels to the frame buffer via the write-combine cache.

21. The computer-readable medium of claim 20 further comprising:

instructions for reading at least one additional plurality of blocks from the system memory into the L2 cache, each of said plurality of blocks comprising at least one plurality of pixels, each such plurality of pixels comprising sub-columns of vertical pixels in the graphic, each said plurality of pixels to reside in consecutive memory location of the frame buffer; and

instructions for each such plurality of blocks, writing each such plurality of pixels to the frame buffer via the write-combine cache.

22. The computer-readable medium of claim 21 further comprising instructions for all pixels in said portrait-oriented graphic to be written to the frame buffer via the write-combine cache using said method.

23. The computer-readable medium of claim 21 further comprising instructions for rendering said portrait-oriented graphic in a primary portrait mode.

24. The computer-readable medium of claim 21 further comprising instructions for rendering said portrait-oriented graphic in a secondary portrait mode.

25. A system for copying a portrait-oriented graphic in a system memory to a landscape-oriented frame buffer for a default landscape-oriented display device, said system comprising:

means for loading a plurality of blocks of pixels (a band) into an L2 cache;

means for processing the band into sub-columns of pixels in the graphic having consecutive memory locations on the frame buffer; and

means for writing said sub-columns of pixels to the graphic via a write-combine cache.

26. The system of claim 25 further comprising instructions for rendering said portrait-oriented graphic in a primary portrait mode.

27. The system of claim 25 further comprising instructions for rendering said portrait-oriented graphic in a secondary portrait mode.

28. A hardware device for copying a portrait-oriented graphic in a portrait-oriented first memory location to a landscape-oriented second memory location, said hardware device comprising:

a processor, said processor comprising an L2 cache and a write-combine cache;

a first memory coupled to said processor, said first memory having portrait-oriented addressing such that the pixels of the graphic, from left to right in rows running from top to bottom, are stored in consecutive memory locations in said first memory;

a second memory coupled to said processor, said second memory having landscape-oriented addressing such that the pixels of the graphic must be remapped;

computer instructions for said processor to load a plurality of blocks comprising pixels from said first memory into the L2 cache, process said pixels into two or more sub-columns comprising pixels that will be written to consecutive memory locations of the second memory, and write said sub-columns to said second memory via the write-combine cache.

29. The hardware device of claim 28 wherein said computer instructions further comprise instructions for rendering said portrait-oriented graphic in a primary portrait mode.

30. The hardware device of claim 28 wherein said computer instructions further comprise instructions for rendering said portrait-oriented graphic in a secondary portrait mode.